

## Students win with 2,843 mpg car

300 students competed to build, drive very high mileage vehicles MSNBC

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A high school team beat out students from 23 universities to take home the grand prize for designing, building and driving a vehicle that went the farthest distance using the least amount of fuel.

Not only that, but the students from Mater Dei High School of Evansville, Ind., set a new mileage record at the 2008 Shell Eco-marathon Americas, held over the weekend at the California Speedway in Fontana, Calif.

Their three-wheeled, combustion-engine vehicle achieved 2,843.4 miles per gallon.

"When we first arrived, I wasn't sure a small high school like Mater Dei could compete with all these elite colleges," team captain Justin Stute said in a statement announcing the results. "But our first run broke the record and then our second car did even better. That really motivated both of our teams to go all the way."

The event brought together 300 students on 32 teams from four high schools and 23 universities from Canada, Mexico and the U.S.

The entries included 25 vehicles powered by combustion engines, four by fuel cell/hydrogen technology, one by diesel fuel, one by LPG (liquid petroleum gas) and two by solar power.

The weather conditions — wind gusts up to 50 mph — created challenges and led one team to switch to a heavier driver for stability. But that also meant a vehicle redesign.

"We designed a car for a special driver but when we entered into the track at first, we had to change drivers," said Eugenio Martin, a student from the Universidad Nacional Autonoma De Mexico. "Once the car was modified for the other driver, we had transmission problems. It is the biggest success for us, and it's the greatest feeling because we fixed the transmission problem in one and a half hours."

The winners by category were:

Grand prize: Mater Dei High School won a \$10,000 grand prize with their vehicle.

**Combustion engine:** Mater Dei also took first place in this category.

**Diesel:** The College of the Redwoods in Eureka, Calif., team achieved 304.5 mpg.

LPG: Schurr High School in Montebello, Calif., achieved 163.5 mpg.

**Fuel cell/hydrogen:** Penn State's team achieved the equivalent of 1,668.3 mpg in its Blood, Sweat and Gears vehicle.

**Solar:** The Purdue University team achieved the equivalent of 2,861.8 mpg. That's higher than the Mater Dei vehicle, but event rules do not allow solar vehicles to compete for the grand prize.

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